

What is claimed is:

1. A fluid control apparatus characterized in that the apparatus comprises a plurality of fluid controllers, and a plurality of on-off devices arranged respectively at an inlet side and an outlet side of each of the fluid controllers, each of the on-off devices comprising one valve or a plurality of valves, with the adjacent valves connected to each other without using tubing,

10 each of the on-off devices being one of five kinds including a 2-type on-off device having a two-port valve, a 2-3-type on-off device having a two-port valve and a three-port valve, a 2-3-3-type on-off device having a two-port valve and two three-port valves, a 3-15 3-type on-off device having two three-port valves, and a 3-3-3-type on-off device having three three-port valves, main bodies of two-port valves of all types of on-off devices being identical in configuration and each having an inlet and an outlet in a bottom face thereof, main 20 bodies of three-port valves of all types of on-off devices being identical in configuration and each formed in a bottom face thereof with an inlet, an outlet always in communication with the inlet, and an inlet-outlet subopening.

2. A fluid control apparatus according to claim 1

wherein a fluid is passed through at least one of the fluid controllers, and the 2-type on-off device is disposed at each of the inlet side and the outlet side of said at least one fluid controller.

5 3. A fluid control apparatus according to claim 1 wherein two kinds of fluids are passed through at least one of the fluid controllers, and the 2-3-type on-off device is disposed at each of the inlet side and the outlet side of said at least one fluid controller.

10 4. A fluid control apparatus according to claim 1 wherein two kinds of fluids are passed through at least one of the fluid controllers, and the 2-3-type on-off device is disposed at the inlet side of said at least one fluid controller, the 2-3-3-type on-off device being
15 disposed at the outlet side thereof.

5. A fluid control apparatus according to claim 1 wherein two kinds of fluids are passed through at least one of the fluid controllers, and a bypass channel bypassing said at least one fluid controller is provided
20 between the inlet side and the outlet side thereof, the 3-3-type on-off device being disposed at each of the inlet side and the outlet side of said at least one fluid controller.

6. A fluid control apparatus according to claim 1

wherein two kinds of fluids are passed through at least one of the fluid controllers, and an evacuating channel is provided at the outlet side of said at least one fluid controller, a bypass channel bypassing said at least one fluid controller and being provided between the inlet side and the outlet side thereof, the 3-3-type on-off device being disposed at the inlet side of said at least one fluid controller, the 3-3-3-type on-off device being disposed at the outlet side thereof.

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